also gave a diuretic, chlorthalidone. Most of the 18 women showed improvement, but the improvement did not differ among the three drugs. The evidence available today does not support the notion that lithium is of clinical use for premenstrual tension.

Neuromuscular and gastrointestinal side effects seen early in lithium treatment occur during the hours after intake of the drug, at the time when the lithium concentration in serum, and to varying extents in tissues, rises steeply and reaches peak values. It would therefore seem rational to attenuate concentration changes through the use of slow release preparations, and various types of these have been available in European countries for a number of years. A good deal of clinical experience and some systematic studies indicate that this way of administering lithium leads to amelioration of not only the initial side effects but also some of the side effects seen later in the treatment, for example tremor.[6-12] Slow-release lithium preparations do not revolutionize lithium treatment, but they are of distinct benefit to many patients. It is strange and sad that such preparations are not yet available in the United States and Canada.

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The Risks of Climbing

HAZARDOUS SPORT is a way of life of an increasing number of our population. Skiing, hang gliding, scuba diving, surfing, motorcycling, white water boating and mountain climbing are associated with fatalities and, often, distinctive injuries. Wilson and his associates have presented in this issue ("Death on Denali") a careful analysis of the hazards of climbing a big mountain where weather, altitude and hazards of the terrain are important risk factors. Wilson's paper appropriately also evaluates the human factors involved in accidents. This is important since human factors can be modified to greatly reduce death and injuries in mountaineering.

Two general human factors that contribute to most mountaineering accidents are (1) the decision to push on under poor conditions; and (2) lack of proper experience and preparation.

Various circumstances contribute to the "push on despite risk" decision. In many instances it is a compressed time schedule. An expedition must complete the climb before supplies run out or before the monsoon comes (Himalayas). A small party must complete the climb because an airline or work schedule dictates a specific return date. In other instances it is a fierce, competitive attitude that scorns defeat or retreat—a "nothing can turn me back" attitude.

Lack of experience and preparation becomes painfully evident in conditions of bad weather and high altitude. These include inadequate clothing and shelters, lack of knowledge of the effects of rapid exposure to high altitude (pulmonary edema, cerebral edema and mountain sickness), lack of knowledge and experience in proper rope technique and crevasse rescue and lack of experience in decision making on tough climbs in regards to a retreat or a bivouac.

The incidence of mountaineering accidents and fatalities is difficult to determine. On Denali and Mount Foraker the risk of death is about 1.2 percent to 1.7 percent. The incidence of substantial injury or illness in 1976 was 5 percent. In the Himalayas the danger is even greater. During the spring of 1975 every tenth person who took part in a large expedition to Nepal perished.[1] The incidence of altitude illness (pulmonary edema, cerebral edema and severe mountain sickness) on Denali in 1976 was 2 percent with five fatalities. High altitude pulmonary edema occurs in

TABLE 1.—*Major Immediate Causes of Climbing Accidents*

	Percent
Fall or slip on rock	29
Slip on snow or ice	20
Avalanche	11
Pulmonary edema, frostbite, other illness	8
Fall into crevasse	8
Hypothermia	2.5
Contributory causes were:	
Exceeding ability	29
Climbing unroped	22
Inadequate equipment	7
Party separated	3

the lower 48 states as well, particularly in the Rockies.[2] The incidence in persons less than 20 years old is approximately 9 percent but it is lower in adults, being approximately 0.6 percent.[3,4] Deaths due to hypothermia and exposure are occurring more frequently in the western states due to an increasing number of winter climbs and cross-country ski trips.[5,6]

The variety of accidents that can occur in climbing is well documented in Wilson's paper. In 1976 the American Alpine Club received reports of a total of 405 persons involved in 214 accidents in the United States.[7] There were 51 deaths.

The major immediate causes of the accidents are shown in Table 1.

In all, 134 persons (63 percent) were aged 15 to 30 years and 19 percent were between 15 and 20 years old.

This is not a complete survey of all climbing accidents occurring in the United States because only a small proportion of accidents are reported to the American Alpine Club.

Despite these gloomy statistics one can enjoy mountaineering safely and age is not a limiting factor. Ricardo Cassin at 66 years of age was still climbing with big Himalayan expeditions. Richard Hechtel of Redwood City, California, at 64 years of age is still climbing big mountains and in 1975 climbed Illimani in Bolivia (21,201 feet). John Graham of Santa Barbara ascended Mt. Denali (20,320 feet) at the age of 65.

A few general suggestions regarding safety in climbing are appropriate:

- Climb for enjoyment. Do not climb to be a hero.
- Know when to turn back.
- Travel with a guide or an experienced (preferably older) climber. Don't climb alone.
- Climb with good equipment and know how to use it.
- Take a climbing course in theory, methods and practical experience. The Sierra Club, The Seattle Mountaineers and the American Alpine Club hold annual courses on various aspects of mountaineering. Practical climbing courses are offered widely in the western states.

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Modern View of Ataxia

ATAXIA IS A SIGN commonly found as a result of the acute and chronic toxicity of ethanol and of such anticonvulsants as phenytoin (Dilantin®). Even if these cases are not counted, ataxia is a frequent presenting sign of a number of acquired and inherited diseases. Though the inherited diseases as a group occur frequently, many of the individual inherited diseases that give rise to ataxia are rare and are well known only to a few specialists. The first descriptions of the inherited ataxias were recorded more than a century ago and they once helped to make neurology a specialty distinct from internal medicine and from psychiatry. This field, the inherited ataxias and the acquired diseases which mimic them, has only recently matured to an independent status in modern neurology. The underlying disorders have recently been classified, loosely, as defects in oxidative metabolism, in lipid catabolism, in the metabolism of small molecules containing nitro-